

CLAIMS

1. A tape-like fiber cable comprising:

a plurality of optical fibers arranged in parallel to each other and each abutted to an adjacent fiber, each of the optical fibers including a cover and a lead extending from the cover, the extending portion of the lead comprising a single mode optical fiber, adjacent to the cover, having a terminal face and a graded index optical fiber fused to the terminal face of the single mode optical fiber;

a terminal face of the respective lead being formed as an inclined surface which is inclined with respect to a plane perpendicular to an optical axis of the lead;

a plane of this tape-like fiber cable and the respective terminal faces of the leads perpendicularly intersect with respect to each other and an intersection between the plane of this tape-like fiber cable and the terminal face is inclined by an angle θ with respect to the optical axis of the lead.

2. A method of forming an inclined surface at a terminal face of a lead of an optical fiber including a cover and the lead extending therefrom, said inclined surface being inclined by a certain angle with respect to a plane perpendicular to an optical axis of the lead, said method comprising the following steps of:

pushing the terminal face of the lead of the optical fiber toward a grinding surface of a grinding means while moving in a certain direction so that a terminal portion of the lead is resiliently bent to form the inclined surface at the terminal face of the lead.

3. A method of forming an inclined surface at a terminal face of each lead of a plurality of optical fibers, arranged in parallel to each other and each abutted to an adjacent fiber to define a tape-like optical fiber cable, each of the optical fibers including a cover and the lead extending therefrom, said inclined

surface being inclined by a certain angle with respect to a plane perpendicular to an optical axis of the respective lead, said method comprising the following steps of:

5 pushing the respective leads of the optical fibers in parallel and together toward a grinding surface of a grinding means while moving in a certain direction so that terminal portions of the respective leads are simultaneously resiliently bent to form the inclined surfaces at the terminal faces of the respective leads.

10 4. A method as set forth in claim 3, wherein each of the optical fibers includes the cover and the lead extending therefrom, the extending portion of the lead comprising a single mode optical fiber, adjacent to the cover, having a terminal face and a graded index optical fiber fused to the terminal face of the single mode optical fiber and having an inclined terminal face, so that the tape-like optical fiber cable can be used as a collimator, and the terminal faces of graded index optical fibers are pushed toward the grinding surface to form the inclined surfaces at the terminal faces of the respective graded index optical fibers.